NORTHERN PLANT NOVELTIES FOR 1934

Dr. N. E. Hansen, Department of Horticulture, State College

Brookings, South Dakota, March 24, 1934

3 pages

This department does not conduct a commercial nursery, but propagates and distributes new varieties originated in this department or imported from similar climates of the Old World. Many acres of seedling fruits have been grown since the work was started by the writer in 1895. The improvement in size and quality of each plant generation is greater year by year. Hybridization and selection are the main methods of improvement.

BULLETINS: The work thus far is described in Bulletin 224, May 1927, and in the annual spring lists since that time. Other bulletins are: Experiments in Plant Heredity, Bulletin 237; Hardy Roses for South Dakota, Bulletin 240; The Shade, Windbreak and Timber Trees of South Dakota, Bulletin 246; Evergreens in South Dakota, Bulletin 254; The Ornamental Trees of South Dakota, Bulletin 260; Shrubs and Climbing Vines of South Dakota, Bulletin 263. A bulletin on the hardy perennial and annual flowers of South Dakota is in preparation.

TERMS. The money received from the sale of plants makes it possible to do the work on a larger scale than would otherwise be possible. Those who have followed the progress of the work for many years know the importance of ordering promptly, as soon as this list is received, as the supply of plants is limited. Terms are cash with order. No credit except to Government Experiment Stations.

Manchu Apricot, Nos. 1-23

Offered for the first time. In my 1924 tour to north Manchuria, home of the old Manchu conquerors of China, I became interested in the apricots native of the region between Harbin, on the Siberian railway, and the Amur River. This section of China comes up like a wedge into eastern Siberia and is cut through by the Siberian railway. The conditions are really those of east Siberia on either side with minimum temperature of about 47 degrees below zero Fahrenheit. I saved seed from many fruits and now have 32 seedlings. All of these are of excellent quality. The size varies more or less and there is no good chance to determine the relative superiority as the seedlings were planted very closely in the row. They are offered herewith for preliminary trial as Manchu Nos. 1--23 inclusive. So far, 23 out of the 32 seedlings have been budded. The trees are a beautiful sight in bloom. The large flowers, white with distinct pink tinge, appear early before the leaves. The fruit is yellow, somewhat smaller than the apricots of commerce, and makes delicious preserves. Trees one-year buds on two-year plum seedlings, each $1.00

Kazan Apple

Offered for the first time. A seedling of Anisim. Fruit round, conical, regular, brilliant red with crimson stripes, a beautiful fruit. Flesh white, juicy, subacid, flesh often red next to the skin. The enormous crops make the size medium or below. It may sell as a large crab or as a small apple. Trees, one-year grafts on common apple stock, each $1.00.

Lina Apple

First offered in 1933. A seedling of Malinda and much like it in conical Shape with blush, but with no knobs. Remarkable for its perfectly conical shape with no corrugations. The flesh is mild subacid and cooks up easily into light yellow sauce of good quality. It is much better than the Malinda itself which does not cook up easily. Name derived from Malinda. Trees each $1.00.

Alexis Crabapple

The original tree of the Dolgo crab and the original tree of the Alexis crab grow near each other on the grounds of this department, but it is very difficult if not impossible to distinguish the two by the fruit. The Dolgo is now famous in many states west and east and up into Canada. Both Alexis and Dolgo make the finest red jelly, sauce and preserves. Both are highly profitable to plant for market. The fruit is a brilliant dark solid red with a trace of blue bloom. Both trees are highly attractive in bloom as well as in fruit. It would be well to have both Alexis and Dolgo in the same plantation to insure pollination of both varieties. One-year grafts of Alexis crab on common apple stock, each $1.00.

Ming Pear

The original tree still stands at this station, free from blight and very productive. Pedigree: Pyrus Ovoidea x Louise Bonne de Jersey, a choice French pear. The fruit is of good commercial size, flesh melting, of delicious flavor, a first class pear. Strong one-year root-grafts on commercial Pyrus Ussuriensis stock, each $1.00.

Mana Sandcherry Hybrid

First offered, spring 1932. A hybrid of the native sandcherry of Dropmore, western Manitoba, with the Burbank, a large and excellent Japanese plum. Fruit round, one inch in diameter. The green-yellow flesh of pleasant quality cooks into rich, red, good-flavored sauce. Pit of medium size with rounded edges and no sharp points. The round shape of this fruit will sell it as a cherry. The name is condensed from Manitoba. This new cherry for the prairies should be of interest at the North. One-year plants budded on native plum, each $1.00.

Ezaptan Sandcherry Hybrid

I was the first to hybridize the sandcherry, Prunus besseyi, with the Japanese plum. Of this series, the Sapa and Opata, introduced in 1908, are perhaps the most widely grown. They are now grown in all the western states from Texas north into Canada. The Sapa is popular because of the rich dark purple-black of the flesh and juice. The fruit cooks into a rich red sauce of high quality. At that time a number of seedlings were introduced of this same pedigree in the hope that general experience would soon determine which was best. The Ezaptan, introduced in 1911, I believe now has been overlooked. It is much like Sapa in every way, but of milder quality, really an excellent substitute for the black sweet cherries which are shipped in from milder climates. A few trees on sandcherry stock, each $1.00.

Select Sandcherries Budded on Native Plum Stock, 177 numbers

Offered for the first time. The sandcherry seedlings distributed from this department are mainly from budded plantations, which means that they are selected seedlings budded on plum roots so that both parents bear large fruit. I am trying to breed this large-fruited good quality type to come true to seed. 177 numbers are available this spring as one or two-year buds on native plum. A few plants are ready for experimenters. Two plants of one kind for $1.00. Not less than $1.00 for each item. They will be distributed under number and are intended as a basis for further experiments.

Select Wild South Dakota Plums, 17 numbers

Offered for the first time. Many thousand seedlings of the native plum of South Dakota have been grown in the effort to obtain varieties with large fruit, larger at least than the common run of plums brought to market. In 1932, the main search was in the Bad River region, west of Chamberlain and Pierre. Seventeen seedlings, Wild South Dakota, Nos. 1--17 were selected. Several of these are yellow plums. None of these are recommended for propagation, but they are one step on the way and can always be used for pollinating the hybrid plums that bloom in the same season. Many people like the stronger flavor of the native plum, especially for preserves and jams. Trees, one-year buds on native plum stock, each 50 cents.

The New Fruits in South Dakota Bulletin 224

Requests are often received from propagators and other experimenters for the new fruits introduced in former years and described in Bulletin 224. Many of these can be obtained in commercial nurseries. From a set which was propagated for our new State Orchard a few can be supplied in one-year budded or grafted trees. Price each, $1.00. Scions when available, one foot for $1.00. Grape vines, each $1.00.

Grapes, Hardy Without Winter Protection

There is a great need for grapes of choice quality that will be hardy without winter protection in South Dakota. Concord and all its descendants will not help us, as they are too short-lived. The Beta and Alpha, which are large fruited selections of the wild grape of Minnesota, are hardy without winter protection, but we need something larger in size and better in quality. In the spring of 1925 I introduced thirty-two of my new grapes, mostly hybrids of the wild grape collected at Bismarck, North Dakota, and Fort Pierre, South Dakota, with choice eastern grapes, especially the Roger hybrids. The series of dry seasons has delayed the propagation of these new grapes, and the demand for cuttings has taken most of the crop each year. For spring I have a few vines of Lachala, Napka, Mandan, Wecota, Shakoka, Azita, Chonkee, Eona, Sonona, and Siposka; the price of one-year old vines is $1.00 each. Better make a second and third choice in case the supply of your first choice is already exhausted. Descriptions in Bulletin 224.

My own opinion is that these new grapes and their successors along the same line of breeding will eventually revolutionize the grape culture of the prairie Northwest. Our prairie farmers will not lay down and give winter protection to any grape vine. But these new grapes are not intended to go into the milder regions where the Concord and its seedlings are hardy without winter protection. The problem now is to find the best few out of the thirty-two varieties. Also, there is a problem of whether the market prefers black grapes, white, or red grapes. Some of the choicest quality grapes are not the largest in size.

The Hansen Alfalfa

Flowers white, seeds white. The first alfalfa with a trademark or distinguishing characteristic by which it may be known. In the 1932 spring list I gave this name to the Hansen Whiteseed Alfalfa of which a few plants were sent out in 1926 (see Bulletin 224). In the spring of 1931 I offered to send ten plants free to the first 300 applicants in South Dakota. Many more than 300 applications were received, so about 3,560 plants were distributed. I am trying to perfect the Hansen alfalfa as rapidly as possible. Female parent: the Yellow Flowered Alfalfa (*Medicago falcata*) from Omsk, Siberia. Male parent: the Cossack Alfalfa. Some strong transplanted two-year-old plants, 10 plants for $1.00.

The Sibturk Alfalfa

This is a hybrid of the Siberian and the Turkestan alfalfas. The female parent is the Yellow Flowered Alfalfa (*Medicago falcata*), which I brought from Semipalatinsk, Siberia, in 1913. The male parent is the Select Turkestan Alfalfa, remarkable for its erect vigorous growth, and which I brought back from my 1906 tour. Sibturk is the name I now choose for the Hansen Hybrid No. 1, described in Bulletin No. 224. This is a very hardy and productive variety, showing astonishing endurance in a field where it has been cut several years as a lawn. The seed is held tightly in the pod. Flowers variegated in many colors, with much yellow. Sibturk is an excellent combination of these two species. The name is condensed from the words Siberia and Turkestan. Seed per packet, 50 cents.

Crested Wheat Grass

One of the plants which I brought back from my seven tours of exploration is Crested Wheat Grass (*Agropyron cristatum*), which I brought first to the United States from Russia. I located this in many different places in eastern Russia and Siberia. Experience quoted in the Country Gentleman of February, 1933, and February, 1934, shows that it is now regarded the best grass for the drylands of the United States. It is worth many millions of dollars, and can be worth many millions more if government aid is given for propagation of this grass, also for getting more seed from its native home. If the western lands are to be put down to grass, it should be to the best kind obtainable, and in this Siberian species, we have a better grass than any of the native grasses of America. All this is noted to show that an agricultural explorer can sometimes help to change things for the better. If ever able to visit Siberia again, I would devote much time to obtaining many thousand pounds of this seed, stripped from the best plants in the most exposed situations. It would pay the prairie West to have this done.

---o---